Case Study Academy of the Holy Family Environmental Club and School-wide Recycling Program September 2011

Recycling programs have helped the Academy of the Holy Family in Baltic, Connecticut save money. Through the initiative of its student-lead Environmental Club and the Club's founding president, the school implemented school-wide paper recycling and instituted an annual campus Environmental Day to help the school reduce its environmental footprint and increase campus-wide environmental awareness.

Background

The Northeast Recycling Council, Inc. (NERC) was awarded a United States Department of Agriculture Rural Utility Services Solid Waste Management Grant in 2009 to provide direct technical assistance and training in waste reduction, recycling, and composting to rural schools in Connecticut, New York, and Delaware. Eight schools participated in NERC's Waste Reduction and Recycling (WR&R) project over the course of two years.

In the fall of 2009, Academy of the Holy Family students organized an Environmental Club and initiated a pilot paper recycling effort. The school agreed to participate in NERC's WR&R project in order to expand its recycling efforts. With the help of NERC staff, paper recycling was expanded to the entire school and student dormitory in January 2010. Additional school projects were undertaken, including a school-wide Environmental Day. NERC worked with Environmental Club members to formulate a WR&R Work Plan outlining goals and activities to be undertaken through their participation in NERC's project. See Attachment A for the Work Plan.

Facts at a Glance

- In 2010, the Academy of the Holy Family recycled an average of 450 pounds per month of paper during the school year.
- The Environmental Day involved all students and most school staff and Sisters in school-wide clean-up and beautification projects.
- Environmental Club students expanded the schools involvement in town beautification efforts.

Academy of the Holy Family Overview

The Academy of the Holy Family (AHF) is a Catholic day and boarding high school for American and international young women. The school is located in the Village of Baltic, in the town of Sprague, Connecticut. The population of Sprague is just over 3,000. The school has 80 students, approximately 60 of whom live on campus.

All school meals are cooked in the Convent kitchen. Forty Sisters live on campus and eat meals family style in their dining area. Only reusable service ware and dishes are used. Approximately 70 students eat breakfast in the campus cafeteria. At lunch, approximately 100 meals are provided and at supper, approximately 80 meals are served for the Sisters and



student boarders. Cafeteria meals are served on reusable trays; although plastic service ware is used and polystyrene bowls are used for cereal, soups, ice cream, etc. Students from the Primary School (located on the AHF campus) also eat hot lunch meals in the High School cafeteria. High School students that do not board typically bring their own lunch.

Due to the large number of meals prepared on campus, the school had previously implemented recycling of cardboard, steel cans, plastic bottles (PET and HDPE), and glass bottles. Sterling Superior, a local hauler, provides dumpsters and hauling. Redeemable beverage containers have been collected for a number of years by one of the Sisters, with revenues used to support a Guatemalan boy. The Convent House also does a collection and fund drive for redeemable containers to support activities for the House.

Nuts and Bolts



AHF Environmental Club

The formation of the Environmental Club in the fall of 2009 was student initiated. With the enthusiastic dedication and work of the Club president, the Club became an energetic constituent on the AHF campus.

The Environmental Club grew to have fifteen active members during the 2010-2011 school year. The Club expanded its AHF school Website presence by posting a description of the Club, along with a PowerPoint presentation developed by Club members, and pictures of Club events. The Club

president completed a Club Manual that was also posted for download on the Website. See Attachment B for the Club Manual.

Although many Club members, including its officers, graduated in the spring of 2011, many students remain active. New Club officers were elected and at the first meeting for the 2011-2012 school year, there were ten students.

School-wide Paper Recycling Program

Students initiated a small pilot paper collection program in November of 2009. The school joined NERC's WR&R project and expanded the program to the entire school and dormitory in January, 2011. All paper and cardboard are collected.

NERC staff contacted the Town of Sprague Council chair in Sprague to solicit curbside collection containers for use throughout the school. The town donated 25 containers and the Environmental Club placed the bins in all school classrooms, the library, and throughout the dormitory.

With NERC guidance, students developed a school-wide educational campaign. Club members conducted an assembly for all students to explain the importance of recycling, how to participate in the new recycling program, acceptable materials, and environmental benefits. Environmental Club members created an informational bulletin board, posters for display, and container signage.

Environmental Club members take turns collecting the recyclable materials one day per week. Environmental Club members and a Sister transport collected materials to a municipal recycling center in a nearby town. Redeemable containers are separated for deposit returns. All proceeds are given to a Sister for support of a Guatemalan boy.



Environmental Day and Community Involvement



On March 10, 2010, Environmental Club members addressed the Sprague Town Council about the importance of recycling and the school's recycling efforts. Environmental Club members participated in the Town's Arbor Day Beautification/Clean-up in early April, 2010. They helped with the town clean-up and also planted bulbs and flowers. Club members were joined by residents and Town Council members.

The School's first ever "Environmental Day" was initiated by Environmental Club members on April 28, 2010. A full day of activities were planned and implemented by the Environmental Club, including:

- Presentation by Environmental Club members and NERC staff to the students on recycling and the environment.
- Campus clean-up, planting of flowers and shrubs, washing statues, and other beautification efforts. All students, and many instructors and Sisters, participated in the event.
 - o Flowers were purchased by an instructor at the school and donated to the Club.
 - Some flowers were also donated by Baltic Greenhouse.
 - Some mulch was sold at a discount to the Club by Home Depot.
 - Additional supplies and tools were purchased by the Environmental Club.

Working to promote "Environmental Day" as an annual event on the AHF campus, Club members organized another event on April 15, 2011. Again a full day of activities were planned and implemented by the Environmental Club, including:

- Presentation by Environmental Club members to the students on the school's recycling effort, with a particular focus on contamination issues.
- Presentation to the students by NERC staff on recycling and greenhouse gas generation.
- Campus clean-up, planting of flowers and shrubs, washing statues, and other beautification efforts.
 Again, all students, and many instructors and Sisters, participated in the event.
- The Club raised enough funds during the school year to purchase additional planting tools, seed, and 345 bulbs.



Other Activities Initiated by the Environmental Club

- School-wide Book Rip-a-thon & Recycling Event: Students tore pages out of unusable school books in order to recycle the paper.
- "Dress-Down" Days: The school is a uniform school. With approval from the school principal, the Environmental Club sponsored several "Dress-Down Days" where students can participate by wearing casual clothing. Participating students donate \$2 to the Environmental Club.
- With the help of the school principal, submitted a grant proposal to Northeast Utilities to request funding to cover hauling expenses for their recycling efforts.

Project Results

The AHF Paper Recycling Program has proven to be very successful. The Program succeeded in diverting about 450 pounds per month from the school waste stream. Also importantly, it has increased the environmental aware ness of students, instructors, and Sisters. While the school had a successful kitchen recycling program, this program was conducted "behind the scenes." The paper recycling program and other projects initiated by the Environmental Club, has been effective in involving students, staff, and Sisters together in reducing the school's environmental footprint.

The Club's Environmental Day is on its way to becoming an institution at the school. The event was viewed very positively by students, staff, and Sisters for being a well-organized and thoughtful undertaking. Club members created an event that combines positive environmental action with the school's spiritual foundation.

By recycling more than 2
tons of paper during the
school year, Academy of the
Holy Family reduced carbon
dioxide emissions (a
greenhouse gas) by about 2.5
metric tons and saved
enough energy to power the
average American home for
about a year.

Challenges and Solutions

<u>Challenge</u>: Establishing a cost-effective paper collection program. The nearest recycling center to the school is 45 minutes away. Paying for a hauler was too expensive for the school to undertake.

<u>Solution</u>: Currently a Sister has agreed to transport the materials. Students collect and store the paper and redeemable containers. The Sister, along with the students, transports the materials one day a week to the recycling center.

<u>Challenge</u>: Implementing an Earth Day event suitable for a religious campus.

<u>Solution</u>: Students initiated an Environmental Day in April with the primary goal of cleaning up the AHF campus (raking leaves, removing branches, washing religious statues, etc.) and planting bulbs and shrubs. The day also includes presentations on recycling and the environment.

Challenge: Eliminating contamination of the recycling bins.

<u>Solution</u>: Ongoing education about the program, with emphasis on student collection and handling of material.

Tips for Success

- Dedicated student to organize an environmental club, provide leadership and enthusiasm.
- Teacher or staff member willing to advise the club, provide direction when needed, and spend the necessary time to participate in meetings and events with the students.
- Willingness of school administration to allow for club formation and to support the undertaking of a new program, such as recycling, as well as other group activities.



Contact Information

Information about the Academy of the Holy Family <u>Environmental Club</u> is posted on the school's Website (http://www.ahfbaltic.org/sub-pages/athletics-clubs/environmentalclub.dwt.php).

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Attachment A

Academy of the Holy Family Environmental Club Paper Recycling Work Plan

The Academy of the Holy Family Environmental Club initiated a pilot paper recycling program. As originally initiated, the paper was collected by Club members and taken home by a Sister to be recycled in her town's curbside recycling program.

Club members established a goal of expanding the program school-wide. Additionally, members wanted to make collection of the paper more sustainable and efficient for the long-term by determining a better means of moving the material from the school to the recycling center.

Club Members would also like to bring awareness of more environmental issues into the school and encourage environmental action by conducting an Earth Day project, as well as adopting at least one other project.

Goals, Strategies, & Tasks

Goal One: Implement a school-wide paper recycling program that is sustainable and efficient.

<u>Strategy</u>: Develop and maintain a paper recycling program in the school that includes all students and staff and that is sustainable in the long-term by determining a cost-effective hauling solution.

Tasks:

- 1. As an interim measure, the Club Advisor will check on others at the school that might help with removal of paper from the school until a permanent solution is found.
- 2. NERC staff will research paper recycling options: Will a hauler collect the paper? At what cost? Can paper perhaps be collected by the town?
- 3. NERC staff will provide options for recycling bins, estimated costs, etc.
- 4. Environmental Club students will investigate potential funding options for the bins: businesses, donors to provide funding.
- 5. With NERC assistance, Club Members will develop an educational campaign for the recycling program.
- 6. Club Members will make the presentation to students.
- 7. Club Members will post signage on all classroom and office paper recycling bins.
- 8. Club Members will make posters and display throughout the school.
- 9. Club Members will display and announce recycling and environmental benefits from the recycling efforts.
- 10. NERC staff will be available for additional educational and promotion as needed.

Timeline:

February - April 2010

Measures of Success:

- 1. Recycling bins obtained and placed in all classrooms.
- 2. Implementation of educational outreach campaign, including presentations, signage, posters, etc.
- 3. More efficient collection of school paper.
- 4. Amount of materials collected through the recycling project, as measured by actual weights of materials or recorded volumes of materials.

<u>Goal Two</u>: Bring awareness of more environmental issues into the school and encourage environmental action by conducting an Earth Day project.

<u>Strategy</u>: Develop and implement an Earth Day event. Conduct school-wide education and promotional campaign about the event.

Tasks:

- 1. NERC will provide Earth Day event ideas, and other information necessary to implement the project.
- 2. Environmental Club members will determine the type of Earth Day activity to be implemented.
 - Determine scope of the event.
 - Determine date and time of the event.
- 3. Committee members will determine collection specifics for additional material to be collected.
 - o Where will the collection occur?
 - How will materials be stored.
 - Who is responsible for sending the collected materials.
- 4. Committee members will discuss the expansion of the school's beverage container recycling, perhaps adding additional collection containers in hallways.
- 5. NERC will provide resources for outreach and promotion of the Earth Day event and recycling drive.
- 6. Committee members will develop outreach and promotional materials for both the Earth Day event and the recycling project.
- 7. Committee members will record tonnages recycled, participation in the event, and evaluation and recommendations for program continuation.

Timeline:

March through May 2010

Measures of Success:

- 1. Number of participants involved in the Earth Day event.
- 2. Troubleshooting comments and concerns about the Earth Day event—documented reporting of issues, solutions, and recommendations for continuing the event in coming school years.

Attachment B

Academy of the Holy Family Environmental Club Manual

Description of Club

The Academy of the Holy Family Environmental Club was founded by students and our teacher Advisor in the fall of 2010. At the Academy, we are involved with various environmental activities, including our newly initiated student-run recycling program. We also sponsor a campus Environmental Day and conduct outreach to increase the awareness of environmental issues in our community.

Mission Statement

"We feel that it is our duty to preserve the environment around us; inform others of the detrimental effects of pollution; and cherish the Earth as one of God's greatest gifts to humanity."

Duties of the Environmental Club:

- Maintaining a manageable paper recycling program, including classroom collection, arranging for transportation to the recycling center, and student and teacher education.
- Maintaining a manageable beverage container recycling program to support David, Sr. John Baptist's sponsor child in Guatemala, and to promote greater diversion of the Academy's waste.
- Promoting environmental awareness through activities such as Environmental Day.
- Engage in fundraising in order to support our activities.

Other Possible Activities for the Environmental Club

- Engaging in other school activities (Such as Catholic Schools Week).
- Working with the town to promote greater environmental awareness. (Such as participating in town beautification efforts).

Suggested School Year Layout

September

- Conduct member recruitment.
- Hold first meeting and club elections for President, Vice President, Secretary, and Treasurer.
- Hold meeting for recycling collection sign up and monthly collection schedule.
 - Collection occurs every two weeks.
 - Distribute the Check Off List for the Classrooms (See Attachment).
- Plan teacher, faculty, and student education.
 - o Post recycling program posters.
 - Distribute fliers and bin signage to all classrooms.
 - Conduct PPT presentation for new students.
- Elected officers, especially the president, must make sure that the recycling bins are placed all over the school (See list of class rooms and don't forget St. Michael's Center!)

- Make sure that club members are collecting materials as scheduled and monitoring bins for contamination.
 - Sort the recycling See Attachment for details). Deliver redeemable recyclable bottles to Sr. John Baptist.
- Set up appointment with Sr. Christina (or whomever is in charge)to drop off the recyclables to the recycling center).
- Start brainstorming for activities and fundraisers.
- Also keep in mind the other club activities so as not to bunch too many activities within a short amount of time (Refer to current school year calendar for specifics).
 - Key events to note for the year are:
 - School's Birthday/ Spirit Week (November)
 - Fill the Bus
 - Winter Concert (Before Break)
 - Christmas Break
 - Catholic Schools Week (January/ February)
 - February Break
 - March for life
 - April Break
 - Prom
 - Retreat
 - Graduation

October

- Hold meeting for recycling collection sign up and monthly collection schedule.
- Sort the recycling and deliver redeemable recyclable bottles to Sr. John Baptist.
- Set up appointment with Sr. Christina (or whomever is in charge) to drop off the recyclables to the recycling center).
- Begin preliminary plans for Environmental Day and other activities.
 - Calculate the costs needed to finance Environmental Day.
- *Note that student council will be pretty active during the months of October to November because of Spirit week.
- Set dates for Dress Down Fundraising dates and discuss other fundraising ideas (See NERC Fundraising Tips and Project Ideas).

November

- Hold meeting for recycling collection sign up and monthly collection schedule.
- Sort the recycling and deliver redeemable recyclable bottles to Sr. John Baptist.
- Set up appointment with Sr. Christina (or whomever is in charge) to drop off the recyclables to the recycling center).
 - Consider storing the recyclables in school in order to be able to drop off as much as possible before break.
- Continue preliminary plans for Environmental Day and other activities.
 - Develop a proposal and submit to Sr. Loreto for approval.
 Contact town about beautification/clean-up day.

 Not exactly the best time to fundraise when considering the other events occurring at this time.

December

- Hold meeting for recycling collection sign up and monthly collection schedule.
- Sort the recycling and deliver redeemable recyclable bottles to Sr. John Baptist.
- Set up appointment with Sr. Christina (or whomever is in charge) to drop off the recyclables to the recycling center).
 - o Get the recycling out of the school before break!!!!
- This month is typically very busy, but it would be great to get in a Dress Down day before break
- Continue preliminary plans for Environmental Day and other activities.
 - Schedule and outline tasks.
 - o Coordinate town beautification/clean-up day.

January

- Hold meeting for recycling collection sign up and monthly collection schedule.
- Sort the recycling and deliver redeemable recyclable bottles to Sr. John Baptist.
- Set up appointment with Sr. Christina (or whomever is in charge) to drop off the recyclables to the recycling center).
- Note: This is usually the month that student council will start planning for Catholic Schools Week
 - Try to get a time slot within Catholic Schools' Week for a presentation or some sort of activity.
 - Prepare presentation/activity for Catholic Schools' Week.
- Continue preliminary plans for Environmental Day and other activities.
 - o Assign tasks.
 - o Plan solicitations for donations of materials (plants, soil, etc.).

February

- Hold meeting for recycling collection sign up and monthly collection schedule.
- Sort the recycling and deliver redeemable recyclable bottles to Sr. John Baptist.
- Set up appointment with Sr. Christina (or whomever is in charge) to drop off the recyclables to the recycling center).
- Continue plans for Environmental Day and other activities.
 - o Conduct solicitations for donations of materials (plants, soil, etc.).

March

- Hold meeting for recycling collection sign up and monthly collection schedule.
- Sort the recycling and deliver redeemable recyclable bottles to Sr. John Baptist.
- Set up appointment with Sr. Christina (or whomever is in charge) to drop off the recyclables to the recycling center).
- Continue plans for Environmental Day and other activities.
 - Continue solicitations of materials and supplies.
 - Outline schedule for the Day.

- o Assign Environmental Club members to be in charge of activities/areas.
- Design posters and announcements about Environmental Day.

April

- Hold meeting for recycling collection sign up and monthly collection schedule.
- Sort the recycling and deliver redeemable recyclable bottles to Sr. John Baptist.
- Set up appointment with Sr. Christina (or whomever is in charge) to drop off the recyclables to the recycling center).
- Coordinate with Sisters to pick-up donations for Environmental Day and other necessary supplies and materials.
- Finalize all tasks and conduct outreach for Environmental Day.
- Conduct Environmental Day and hold evaluation.
- Hold member drive for new Club members.

May

- Hold meeting for recycling collection sign up and monthly collection schedule.
- Sort the recycling and deliver redeemable recyclable bottles to Sr. John Baptist.
- Set up appointment with Sr. Christina (or whomever is in charge) to drop off the recyclables to the recycling center).
- Hold member drive for new Club members.

June

- Hold meeting for recycling collection sign up and monthly collection schedule.
- Sort the recycling and deliver redeemable recyclable bottles to Sr. John Baptist.
- Set up appointment with Sr. Christina (or whomever is in charge) to drop off the recyclables to the recycling center).
- Collect, wash (if necessary), and store recycling collection bins.
- Hold final meeting, goodbye to graduates, welcome new members.

Sorting Recyclables

- 1. When preparing to collect the recyclables, bring at least three different bags—one for paper and cardboard, and two for bottles and cans.
- 2. The paper and cardboard can remain as is and be dropped off at the center. However, the redeemable cans must be separated from the non-redeemable cans. The recycling center that we go to is particular about that. See the chart below for specifics.
- 3. Cans and bottles without labels will not be redeemable.

| Sr. John Baptist (Wal-Mart/Sam's Club Brand) | Sr. John Baptist (Other Redeemable Containers) | Recycling Center |
|--|--|--|
| Any cans or bottles from Sam's Club or Wal-Mart (brand-name) can only be recycled at their stores. Sort and bag separately from other containers. | - Coke - Pepsi - Sprite - Usually any brand name sodas in cans or bottles with the exception of the mini cans and the green bottles (e.g., ginger ale) | - Paper and cardboard - Any bottled water that is not name brand (i.e., Dasani) or irregularly shaped such as Fiji - Milk jugs - Water jugs (Ms. Penny's office will usually recycle those.) - Cans (e.g., soup, beans, veggies) - Other recyclable plastics such as the detergent bottles |

Classroom Check-off List

Basement:

-Library

First Floor:

- -Science room
- -History Room
- -Office
- -Hanlon Hall

Second floor:

- -Art Room
- -CP English Room
- -Honors English Room
- -Computer Room
- -Foods Room
- -Health Room
- -Senior Lunge

Third Floor:

-Spanish Room

- -Psychology Room
- -Math Room 1
- -Math Room 2
- -Religion Room